

Title: **Preventative Maintenance Methods for Heavy Duty Azimuthing Thrusters**

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Abstract

The exploration and sourcing of natural resources takes place mainly in deep sea areas and will move to even more remote places in the future. Therefore DP vessels will increasingly operate under harsh conditions in regions where no dry docking possibilities are available.

Reliable systems that prevent unexpected breakdowns are therefore of increasing importance. Behind this background, the combination of station keeping azimuth thrusters and a condition monitoring system offers clear advantages for offshore DP operations.

These online diagnostic systems measure important parameters and help to forecast unexpected failures and enhance preventative maintenance. Analysed reports result in preventive actions on continuously demanded DP units. These actions can be performed even during the operation or at a convenient operation slot. By using preventive maintenance cost intensive and time absorbing dry-docking or downtimes can be avoided.